

# Executive Summary

17<sup>th</sup> PLMA Award-Winning Load Management Initiatives

## Meet Six Innovators Who Successfully Launched New Initiatives for Meeting Peak Loads

Each year, PLMA Awards are given to honor those in our industry who have created ground-breaking incentive programs ('Pacesetters'), implemented leading-edge technologies ('Pioneers'), and excelled in extraordinary customer engagement ('Thought Leaders').

Each program featured in this summary offers a unique and provocative approach to managing the end use loads that contribute to our industry's collective need to meet peak loads and support the successful grid integration of distributed energy resources.

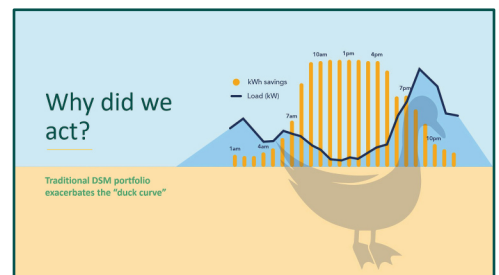
The 17<sup>th</sup> PLMA Awards Compendium is based on a series of dialogues with the six winners and offers detailed insight into how each of their programs is truly innovative.

## PACESETTERS

### Arizona Public Service and EnergyHub

The **Distributed Energy Resource Aggregations** program dynamically manages a portfolio of grid-edge assets including thermostats, batteries, water

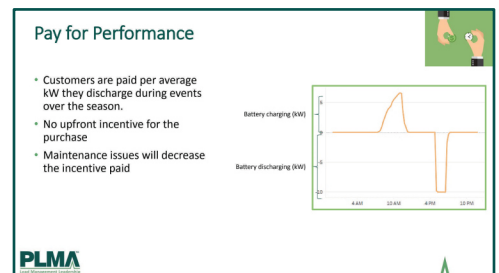
heaters, and solar inverters for peak demand reduction, load shifting and renewables matching, solar management, and advanced load and capacity forecasting. Services are available year-round, multiple times a day, unlike event-based calls for DR. The program was implemented with both bring-your-own and direct install models.



## National Grid and EnergyHub

The **ConnectedSolutions** program is the nation's first pay-for-performance-based Bring-Your-Own-Battery demand response (DR) program

offering residential, commercial, and industrial battery owners incentives for providing battery capacity to support the grid. The program embraces consumer choice by focusing on battery inverters (rather than battery suppliers), which mimics the thermostat DR model by capturing as much of the market as possible with the smallest number of inverter companies.

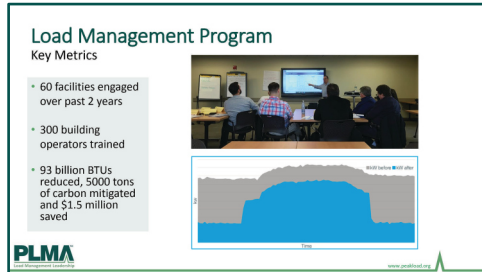


## THOUGHT LEADERS

### City of New York, Department of Citywide Administrative Services (DCAS)

The team behind the **Building Operator Engagement** program proactively built

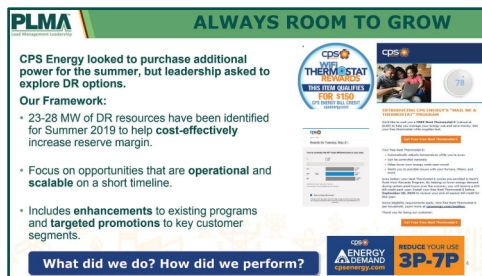
relationships with the facility managers of nearly 600 city buildings, helping improve energy consumption patterns while creating over 100 MW of committed load shed. At the core is a software platform that monitors and analyzes high-resolution load profiles enabling operators to "re-tune" city buildings as well as implement no-or-low-cost operational energy efficiency measures. The team estimates over \$1 million in taxpayer dollars were saved in fiscal year 2019 from load management efforts.



### CPS Energy

CPS Energy embarked on an impressive **Public Engagement** effort to add over 40 MW to their demand

response (DR) portfolio for summer 2019, over the course of just a few months. Multiple new program options were created or expanded, including DR Coaching for commercial customers, an enhanced behavioral DR program, and a 'Mail Me a Thermostat' initiative that offered a free pre-enrolled thermostat to residential customers who had high energy use. Local television stations provided energy peak awareness messages as part of the weather segment of their newscasts.

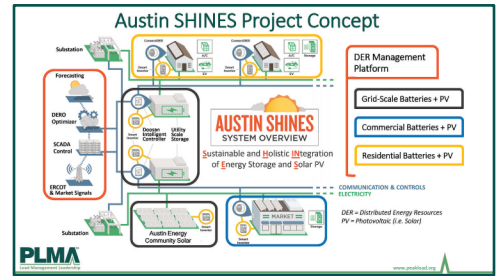


## PIONEERS

### Austin Energy

The **Austin SHINES Project** integrates solar photovoltaics, battery energy storage, smart inverters, forecasting

tools, and market signals all into a software optimization platform at grid-scale. Together, the system provides utility peak load reduction, day-ahead energy arbitrage, real-time price dispatch, voltage support, distribution congestion management, and demand charge reduction. All of the methodologies have been documented in a replicable and configurable format to serve other utilities, across multiple jurisdictions.



### Connected Energy (U.K.) Ltd

The **Battery Recycling in Belgium** project demonstrates the benefit of re-using and re-deploying

electric vehicle battery packs. Installed at an industrial site, the battery system provides a frequency response service to the local grid operator to help it balance electricity supply and demand for network stability. This is the first time 'second-life' batteries have been used at an industrial scale in this way in the country of Belgium.



[Click Here to View the Full 17th PLMA Awards Compendium](#)

The purpose of PLMA's Awards Compendia is to encourage implementation and inspire continued innovation. PLMA's member practitioners can be a valuable resource in your efforts. Please reach out if we can be of assistance. And if you know of a program that deserves special recognition, consider submitting an abstract for next year's awards cycle. Special thanks to the PLMA Awards Program co-chairs and PLMA staff for bringing this compendium together. [www.peakload.org](http://www.peakload.org) | REV1120